AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (CURRENTLY AMENDED) An electronic signature method comprising the steps of:

analyzing a target document stored in a format representing a tree structure to generate the tree structure of the target document ~~a representation having a~~ structure in a memory;

generating ~~an~~ a file signature code by encrypting said document as a whole and generating electronic ~~signature from~~ signatures corresponding to each structural element of said generated tree structure by encrypting said each structural element ~~the structure of the generated representation~~; and

concatenating the generated file signature code and the electronic signatures generated from each of said structural element of said tree structure ~~electronic signatures~~ into a single signature corresponding to the tree structure ~~of the generated representation~~.

2. (CURRENTLY AMENDED) An electronic signature method according to claim 1, further comprising the step of setting a depth code designating a level of the tree structure said electronic signature is to be generated, ~~attachment of electronic signatures to structural elements of the~~

~~document,~~ whereby precision of reliability judgment of a document with an electronic signature can be varied depending on the level.

3. (PREVIOUSLY PRESENTED) An electronic signature method according to claim 1, wherein a rate of coincidence between the target document and the target document with an electronic signature is found from a rate of structural elements having authenticated electronic signatures to the whole structure.

4. (CURRENTLY AMENDED) A method according to claim 1, wherein said concatenating step includes putting the generated file signature code and the generated electronic signatures in a row.

5. (CURRENTLY AMENDED) An electronic signature apparatus comprising:

means for analyzing a target document stored in a format representing a tree structure to generate the tree structure of the target document ~~a representation having a~~ structure in a memory;

means for generating a file signature code by encrypting said document as a whole;

means for generating ~~an~~ electronic ~~signature~~ signatures ~~from~~ corresponding to each structural element of said generated tree structure by encrypting said each structural element~~the structure of the generated representation~~; and

means for concatenating the generated file signature code and the electronic signatures generated from each of said structural element of said tree structure ~~electronic signatures~~ into a single signature corresponding to the tree structure ~~of the generated representation~~.

6. (CURRENTLY AMENDED) An electronic signature apparatus according to claim 5, wherein a depth code designating a level of tree structure said electronic signal is to be generated ~~attachment of electronic signatures to structural elements of the document~~ can be set by said means for generating an electronic signature, whereby precision of reliability judgment of a document with an electronic signature can be varied depending on the level.

7. (CURRENTLY AMENDED) An electronic signature apparatus according to claim 5, wherein said means for concatenating puts the generated file signature code and the generated electronic signatures in a row.

8. (PREVIOUSLY PRESENTED) An electronic signature apparatus according to claim 5, further comprising:

means for analyzing the structure of the target document to verify the target document having the generated electronic signature; and

means for analyzing each of the electronic signatures of the structural elements of the target document.

9. (ORIGINAL) An electronic signature apparatus according to claim 8, wherein said means for analyzing the electronic signature determine a rate of coincidence between the target document and the target document with an electrical signature from a rate of structural elements having authenticated electronic signatures to the whole structure.

10. (CURRENTLY AMENDED) An electronic signature apparatus comprising:

an electronic signature generator including:

means for analyzing a target document stored in a format representing a tree structure to generate ~~a representation having a~~ the tree structure of the target document in a memory;

means for generating a file signature code by encrypting said document as a whole;

means for generating ~~an~~ electronic ~~signature~~ signatures ~~from~~ corresponding to each structural element of said generated tree structure by encrypting said each structural element~~the structure of the generated representation~~;

means for concatenating the generated file signature code and the electronic signatures generated from each of said structural element of said tree structure ~~electronic signatures~~ into a single signature corresponding to the tree structure ~~of the generated representation~~; and

an electronic signature analyzer including:

means for analyzing a structure of the target document having the generated electronic signature; and

means for analyzing the added electronic signatures.

11. (PREVIOUSLY PRESENTED) An electronic signature method according to claim 2, wherein a rate of coincidence between the target document and the target document with an electronic signature is found from a rate of structural elements having authenticated electronic signatures to the whole structure.

12. (CURRENTLY AMENDED) A method according to claim 2, wherein said concatenating step includes putting the generated file signature code and the generated electronic signatures in a row.

13. (CURRENTLY AMENDED) A method according to claim 3, wherein said concatenating step includes putting the generated file signature code and the generated electronic signatures in a row.

14. (CURRENTLY AMENDED) A method according to claim 11, wherein said concatenating step includes putting the generated file signature code and the generated electronic signatures in a row.

15. (CURRENTLY AMENDED) An electronic signature apparatus according to claim 6, wherein said means for concatenating puts the generated file signature code and the generated electronic signatures in a row.

16. (PREVIOUSLY PRESENTED) An electronic signature apparatus according to claim 6, further comprising:

means for analyzing the structure of the target document to verify the target document having the generated electronic signature; and

means for analyzing each of the electronic signatures of the structural elements of the target document.

17. (PREVIOUSLY PRESENTED) An electronic signature apparatus according to claim 7, further comprising:

means for analyzing the structure of the target document to verify the target document having the generated electronic signature; and

means for analyzing each of the electronic signatures of the structural elements of the target document.

18. (PREVIOUSLY PRESENTED) An electronic signature apparatus according to claim 15, further comprising:

means for analyzing the structure of the target document to verify the target document having the generated electronic signature; and

means for analyzing each of the electronic signatures of the structural elements of the target document.

19. (PREVIOUSLY PRESENTED) An electronic signature apparatus according to claim 17, wherein said means for analyzing the electronic signature determine a rate of coincidence between the target document and the target document with an electrical signature from a rate of structural elements having authenticated electronic signatures to the whole structure.

20. (PREVIOUSLY PRESENTED) An electronic signature apparatus according to claim 18, wherein said means for analyzing the electronic signature determine a rate of coincidence between the target document and the target document with an electrical signature from a rate of structural elements having authenticated electronic signatures to the whole structure.